

Claims

1. Device for the illumination of the stope supports in a longwall face with light sources and with system controller devices at each of the stope supports as well as with, for each, one control power supply unit for, in each case, a limited number of system controllers to supply them with low voltage,
characterized by the fact that
the light sources are connected to the control power supply units.
2. Device according to claim 1,
characterized by the fact that
LEDs (light-emitting diodes) are provided as the light sources.
3. Device according to claim 1,
characterized by the fact that
the light sources which are connected to one control power supply unit have a nominal current which is not greater than the difference between the nominal current of the control power supply unit and the maximum current of the connected system controllers.
4. Device according to claim 1,
characterized by the fact that
the current is measured at the output of the control power supply unit and on overshoot of a fixed minimum current the power supply of individual, or all, the connected light sources is switched on.
5. Device according to claim 1,
characterized by the fact that
the current is measured at the output of the control power supply unit and on overshoot of a fixed minimum [sic] current the power supply of individual, or all, the connected light sources is interrupted or

reduced.

6. Device according to claim 1,
characterized by the fact that
with the switching on of the light sources of a stope support there is a switching off of the
associated system controller.
7. Device according to claim 1,
characterized by the fact that
the switching on of the light sources of a stope support is done by presence detectors.
8. Device according to claim 1,
characterized by the fact that
a light power supply unit is connected to the supply line to each of the control power supply units,
where the control power supply unit for supplying power is assigned to each system controller, or
a group of system controllers, and the light power supply unit is assigned to the light sources of a
stope support or a group of stope supports.
9. Device according to claim 1,
characterized by the fact that
the light sources which can be switched on simultaneously are divided into groups,
that in the supply line for the light sources an AC generator, and in the supply line between the AC
generator and each of the groups a rectifier is connected, where the rectifiers of both groups are
directed in opposite senses.